



SEQUENCE LISTING

<110> DELGADO, AURORA BRIEVA
VILLARRUBIA, VINCENTE GARCIA
GOMEZ-PAMO, ANTONIO GUERRERO
RANIERI, JUAN PABLO PIVEL
GALLEGO, GUILLERMO GIMENEZ
TUDURI, JOSE ANTONIO MATJI

<120> PHARMACOLOGICALLY ACTIVE POLYPEPTIDE GLYCOCONJUGATES

<130> 618999-1/JP/B-4275 PCT

<140> 09/913,351
<141> 1999-10-21

<150> PCT/ES99/00338
<151> 1999-10-21

<150> ES P9900408
<151> 1999-02-26

<160> 5

<170> PatentIn Ver. 2.1

<210> 1
<211> 230
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Formula
sequence

<220>
<221> MOD_RES
<222> (1)..(48)
<223> Variable amino acid; this Xaa range may encompass
3-48 amino acids

<220>
<221> MOD_RES
<222> (50)..(62)
<223> Variable amino acid; this Xaa range may encompass
9-13 amino acids

<220>
<221> MOD_RES
<222> (64)
<223> Gln, Glu, Arg or Lys

<220>
<221> MOD_RES
<222> (65)
<223> Variable amino acid

<220>
<221> MOD_RES
<222> (66)
<223> Hydrophobic amino acid

<220>
<221> MOD_RES
<222> (67)
<223> Leu, Ile, Val or Met

<220>
<221> MOD_RES
<222> (68)..(106)
<223> Variable amino acid; this Xaa range may encompass
15-39 amino acids

<220>
<221> MOD_RES
<222> (109)
<223> Hydrophilic amino acid

<220>
<221> MOD_RES
<222> (110)
<223> Gln, Glu or His

<220>
<221> MOD_RES
<222> (111)
<223> Leu or Val

<220>
<221> MOD_RES
<222> (112)..(117)
<223> Variable amino acid

<220>
<221> MOD_RES
<222> (119)
<223> Variable amino acid

<220>
<221> MOD_RES
<222> (121)..(122)
<223> Variable amino acid

<220>
<221> MOD_RES
<222> (123)
<223> Leu or Ile

<220>
<221> MOD_RES
<222> (124)..(179)
<223> Variable amino acid; this Xaa range may encompass
13-56 amino acids

<220>
 <221> MOD_RES
 <222> (181)..(206)
 <223> Variable amino acid; this Xaa range may encompass
 15-26 amino acids

<220>
 <221> MOD_RES
 <222> (208)
 <223> Variable amino acid

<220>
 <221> MOD_RES
 <222> (209)
 <223> Val, Ile, Leu or Met

<220>
 <221> MOD_RES
 <222> (210)..(217)
 <223> Variable amino acid; this Xaa range may encompass
 1-8 amino acids

<220>
 <221> MOD_RES
 <222> (218)..(230)
 <223> Variable amino acid; this Xaa range may encompass
 1-12 amino acids

<400> 1
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35 40 45
 Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa
 50 55 60
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 65 70 75 80
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 85 90 95
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Cys Xaa Xaa Xaa Xaa
 100 105 110
 Xaa Xaa Xaa Xaa Xaa Cys Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 115 120 125
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 130 135 140
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

145					150				155				160			
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	
				165					170					175		
Xaa	Xaa	Xaa	Gly	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	
				180					185					190		
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	
				195					200					205		
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	
				210					215					220		
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa											
225					230											

```
<210> 2
<211> 37
<212> PRT
<213> Ricinus communis
```

```
<400> 2
Glu Ser Lys Gly Glu Arg Glu Gly Ser Ser Ser Gln Gln Cys Arg Gln
  1                    5              10              15
Glu Val Gln Arg Lys Asp Leu Ser Ser Cys Glu Arg Tyr Leu Arg Gln
      20              25              30
Ser Ser Ser Arg Arg
      35
```

```
<210> 3
<211> 68
<212> PRT
<213> Ricinus communis
```

```

<400> 3
Gln Gln Gln Glu Ser Gln Gln Leu Gln Gln Cys Cys Asn Gln Val Lys
  1                               10                      15
Gln Val Arg Asp Glu Cys Gln Cys Glu Ala Ile Lys Tyr Ile Ala Glu
  20                      25                      30
Asp Gln Ile Gln Gln Gly Gln Leu His Gly Glu Glu Ser Glu Arg Val
  35                      40                      45
Ala Gln Arg Ala Gly Glu Ile Val Ser Ser Cys Gly Val Arg Cys Met
  50                      55                      60
Arg Gln Thr Arg
  65

```

<210> 4

<211> 34
 <212> PRT
 <213> Ricinus communis

<400> 4
 Pro Ser Gln Gln Gly Cys Arg Gly Gln Ile Gln Glu Gln Gln Asn Leu
 1 5 10 15

Arg Gln Cys Gln Glu Tyr Ile Lys Gln Gln Val Ser Gly Gln Gly Pro
 20 25 30

Arg Arg

<210> 5
 <211> 65
 <212> PRT
 <213> Ricinus communis

<400> 5
 Gln Glu Arg Ser Leu Arg Gly Cys Cys Asp His Leu Lys Gln Met Gln
 1 5 10 15

Ser Gln Cys Arg Cys Glu Gly Leu Arg Gln Ala Ile Glu Gln Gln Gln
 20 25 30

Ser Gln Gly Gln Leu Gln Gly Gln Asp Val Phe Glu Ala Phe Arg Thr
 35 40 45

Ala Ala Asn Leu Pro Ser Met Cys Gly Val Ser Pro Thr Glu Cys Arg
 50 55 60

Phe
 65



MARKED-UP PAGE 2

2

<220>
<221> MOD_RES
<222> (66)
<223> Hydrophobic amino acid

<220>
<221> MOD_RES
<222> (67)
<223> Leu, Ile, Val or Met

<220>
<221> MOD_RES
<222> (68)..(106)
<223> Variable amino acid; this Xaa range may encompass
15-39 amino acids

<220>
<221> MOD_RES
<222> (109)
<223> [Hydrophobic] amino acid
Hydrophilic

<220>
<221> MOD_RES
<222> (110)
<223> Gln, Glu or His

<220>
<221> MOD_RES
<222> (111)
<223> Leu or Val

<220>
<221> MOD_RES
<222> (112)..(117)
<223> Variable amino acid

<220>
<221> MOD_RES
<222> (119)
<223> Variable amino acid

<220>
<221> MOD_RES
<222> (121)..(122)
<223> Variable amino acid

<220>
<221> MOD_RES
<222> (123)
<223> Leu or Ile

<220>
<221> MOD_RES
<222> (124)..(179)
<223> Variable amino acid; this Xaa range may encompass
13-56 amino acids
